A

Project Report

on

DIGITAL DOCUMENT GENERATION USING PORTAL MIDDLEWARE

Submitted in Partial Fulfillment of
the Requirements for the Third Year
of

Bachelor of Engineering

in

Computer Engineering

to

North Maharashtra University, Jalgaon

Submitted by

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2015 - 2016

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DEPARTMENT OF COMPUTER ENGINEERING

CERTIFICATE

This is to certify that the project entitled *Digital Document Generation using Portal Middleware*, submitted by

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in partial fulfillment of the Third Year of *Bachelor of Engineering* in *Computer Engineering* has been satisfactorily carried out under my guidance as per the requirement of North Maharashtra University, Jalgaon.

Date: April 04, 2016
Place: Jalgaon

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Abstract

In the real life, documents such as Aadhar card, Caste certificate, Income certificate, Nationality, Non-creamy layer etc. plays very important role for identification, education and other various fields. Now a days for issuing these documents the individual have to face many problems such as manually contact to office, write some application and after few days documents also have to receive manually from the office. This all process is time consuming and applicant got irrited by going to office repeatedly. To solve the above discussed problem and provide facilities to the applicant, the Digital Document Generation using Portal Middleware is a solution. This project also support to our prime-ministers Digital India concept. In which the applicant simply request for the document to be issue, provide required information and attached the required document to system from any location. This request is processed by system and generates the requested document which is authorized by government authority, digitally. And generated document is sent to the requested applicant through E-mail. So, as a result, the applicant can get the any type of document from any location easily, due to which the applicants time can be saved. The DDGUM project provides facility to issue documents quickly and efficiently and to support to digitalize India in the word.

Chapter 1

Introduction

Introduction chapter introduces the concept, it focusses exactly on what is the meaning of the idea and explains the actual working of it.

Chapter is of seven sections. First section 1.1 describes background of the project, motivation is describe in section 1.2, problem definition is described in section 1.3, section 1.4 describes the scope of the project, the various objectives of the project are described in section 1.5, overall organization of the project is described in section 1.6, section 1.7 gives summary.

1.1 Background

Nowadays for issue any documents it is required to issue it digitally for save time, avoid corruption etc. The applicant must need to gives some document related information such as aadhar card number, all required documents numbers etc. Applicant also required to attach the scan copies of the documents of which he provide the information. By the addhar card[3] number the applicant personal information is get. From the required documents numbers provide by the user, it is verify that the the document which is attached by the applicant is valid or not. After verification the required document is generated in PDF format automatically using itext PDF generation library of java. For generate the document generated digitally it is required to store the data of the user this is done by use of the database. Nowadays there is problem of unauthorised access for avoid this the user ID and password is provide to user. For avoid illegal attachment the document verification is done.

1.2 Motivation

In existing system for issue any document applicant required to go in office repeatedly, applicant required to fill complicated form. After the document is generated more time

is required for get that document to the appropriate applicant. For know which type of information is required for issue any document ?, which attach documents are required ?, for get all this required information required that applicant need to go in particular office. For issue this documents as early as possible applicant paid some amount to third party by this some corruption is also done. For avoid such problems this project proposed as solution. In this project applicant only required to select document, attach required documents, fill required information as by providing only required document number. After generating the document he will get document as soft copy.

1.3 Problem Definition

In the real life documents such as Aadhar card, Cast Certificate, Income Certificate, Nationality, Non Creamilayer etc.[1][2] plays very important role for Identification, Education and other various fields. Nowadays for issuing these documents the individual have to face many problems such as the individual have to go to the particular office, write the application along with required documents and related information, and again go to office for getting that document. This all process is time consuming and applicant got irrited by going to office repeatedly. So, for saving the time the common person may get the help of third person by paying some amount to them and that third person also pay some money to the Govt. authority for authorized that document. In this way there is corruption also.

To avoid the time wasting and corruption as discussed above, the Digital Document Generation using Portals Middleware is a solution. Using this project, the applicant can get any type of document from any location easily, due to which the applicants time can be saved. Using this project, applicant creates account on the system using E-mail id and password. That account is validated using verifying the email id. The applicant can perform any type of document related operations such as issue, update etc. using that account. For issuing any document, the applicant login to his account. Select the document to be issue, then one form is appeared which request you to provide personal information, document related information and to attach the required documents. In that information, there is one unique information of the applicant i.e. Aadhar cards UID no. By using his UID no, his previous record is fetched and based on that his request is decided whether it is valid or not. If applicant not have aadhar card, then we also provide facility to generate aadhar card if user interested and also the requested document related information along with attached documents is checked. So after verifying that the request is valid, that request is processed by the system. Means the request is analyzed that which type of document is required, which location the applicant belongs to (taluka, district etc.) and then the request is sent to

that particular office. The govt. authorized person in that office also re-verify that request is valid or not within their own region. He also verify the attached documents from the office it is issued. Then after verification, he will generate that particular document, using the particular format. So, to provide digital stamp to it which contain digital signature or barcode or both depend on the document. After the whole process is done, including document generation and authentication, that authorized document is sent to the requested applicant on his created account, and notification is also given on Email and the updation is also done in all databases, including office and applicant accounts.

1.4 Scope

Applicant must have account for know all the information about document and issue document he want. Applicant must have Aadhar card for issue any document. Document genarated in PDF format automatically. Applicant able to see data automatically.

1.5 Objective

The main aim of this project is applicant is able to issue document from in remote location at any time. Applicant get document in less time. Applicant know all the process of how document issue, which documents are required.

1.6 Organization Of Report

This section provide the overall layout of the mini project Report on the topic *Digital Document Generation Using Portal Middleware*, means the organization of each and every chapter. This contains the Introduction, System Analysis, System Design, System Requirements and Analysis etc of the project. Introduction chapter no. 1 introduce the concept, it focusses exactly on what is the meaning of the project and explains what is actually the working of the project. All ideas about the project are cleared here. System Analysis chapter no. 2 shows overall analysis of the system, description of the system, meaning of the system. In the addition to that literature survey, proposed system and feasibility study, are also described in this chapter. various system requirements are elaborated in system requirement specifications chapter no. 3. Study of various system designs like ER diagrams, DFDs and UML diagrams is also done in the system design chapter no. 4. Implementation chapter no. 5 describes how the system is implement, various algorithms used for build the system. The result is test by using some test cases in system testing chapter no. 6. Results and Analysis chapter no. 7 shows the actual result of the project and analysed that result. Future Scope

chapter no. 8 will provides various developers future plans about the project and finally conclude the project.

1.7 Summary

This chapter shows the introduction of the project. The next chapter provides system analysis of the project.

Chapter 2

System Analysis

System Analysis chapter shows overall system analysis of the concept, description of the system, meaning of the system. Systems analysis is the study of sets of interacting entities, including computer systems analysis. The development of a computer based information system includes a systems analysis phase which produces or enhances the data model which itself is a precursor to creating or enhancing a database. There are a number of different approaches to system analysis. When a computer based information system is developed, systems analysis would constitute the development of a feasibility study, involving determining whether a project is economically, socially, technologically and organizationally feasible.

Chapter is of seven sections. Section 2.1 describes the literature survey of project, description of system use in project is describe in section 2.2, feasibility study is described in section 2.3, section 2.4 describes the risk analysis of the project, the project scheduling of the project is described in section 2.5, effort allocation for project is described in section 2.6, section 2.7 gives summary.

2.1 Literature Survey

From some years for issue any documents manually process is done. First applicant is request for application by fill required information and attach required documents. To verify this information some time required. And after generate the document it will also take some time to deliver that document to appropriate person. After some development the document is generated digitally but there is seperate appliacation is required for issue each document. For a government officer, when there are multiple applicants are requested for issue different documents then officer is required to use separate application for each document. There is no such application is available which is provide the service for issue different types of

documents. The project Digital Document Generation Using Portal Middleware is provide above discussed facility. In this project applicant is issue various documents such as aadhar card, voter ID card, nationality certifikit, Caste certifikit etc.

2.2 Proposed System

DDGUM project is proposed for solve the problem discuss in section 2.1. This system provides service to applicant that applicant can issue any document from any remote relocation at any time. Using this system, applicant creates account on the system using E-mail id and password. That account is validated using verifying the email id. The applicant can perform any type of document related operations such as issue, update etc. using that account. For issuing any document, the applicant login to his account. Select the document to be issue, then one form is appeared which request you to provide personal information, document related information and to attach the required documents. In that information, there is one unique information of the applicant i.e. Aadhar cards UID no. By using his UID no, his previous record is fetched and based on that his request is decided whether it is valid or not. If applicant not have aadhar card, then we also provide facility to generate aadhar card if user interested. And also the requested document related information along with attached documents is checked. So after verifying that the request is valid, that request is processed by the system. Means the request is analyzed that which type of document is required, which location the applicant belongs to (taluka, district etc.) and then the request is sent to that particular office. The govt. authorized person in that office also reverify that request is valid or not within their own region. He also verify the attached documents from the office it is issued. Then after verification, he will generate that particular document, using the particular format. And provide digital stamp to it which contain digital signature or barcode or both depend on the document. After the whole process is done, including document generation and authentication, that authorized document is sent to the requested applicant on his created account, and notification is also given on Email. And the updation is also done in all databases, including office and applicant accounts.

2.3 Feasibility Study

A Feasibility study is an evaluation and analysis of the potential of the proposed project which is based on extensive investigation and research to give full comfort to the decisions makers. Feasibility studies aim to objectively and rationally uncover the strengths and weaknesses of the existing business or proposed venture, opportunities and threats as presented by the environment, the resources required to carry through, and ultimately the

prospects for success.

2.3.1 Economical Feasibility

In this project the required hardware to applicant is scanner and computer. Nowadays each customer have self computer. So customer can use self computer or laptop which is economically beneficial to them.

2.3.2 Operational Feasibility

This project do not cause any harmful impact on the environment. So it is operationally feasible.

2.3.3 Technical Feasibility

Java JDK and itext pdf generator library required for project is easily available. Also we are able to implement it. So the project technically feasible.

2.4 Risk Analysis

Risk analysis and management are a series of steps that help a software team to understand and manage uncertainty. Many problems can plague a software project. A risk is a potential problem it might happen, it might not. But, regardless of the outcome, its a really good idea to identify it, assess its probability of occurrence, estimate its impact, and establish a contingency plan should the problem actually occur. Everyone involved in the software process managers, software engineers, and customers participate in risk analysis and management. Before embarking on the project it is necessary to review all of the risks that might be involved in it. These risks have been documented before the coding of the project started.

The majority of the risk components lie under the categories.

1. Project Risks
2. Business Risks
3. Technical Risks

The table 2.1 describe the risk analysis of the project

Projet Risk	Yes	No
Will the project meets requirements for what is intended to do	Yes	No
Business Risks	No	No
Will project satisfy business needs in the organization	Yes	NO
Technical Risks	NO	NO
Will the project technically support all requirements	Yes	No

Table 2.1: Risks Analysis

2.5 Project Scheduling

Software project scheduling distributes estimated effort across the planned project duration by allocating the effort to specific task. Scheduling for projects can be viewed from two different perspectives.

1. In the First view, an end date for release of a computer-based system has already been established and fixed.

2. In the second view, end-date is set by the software engineering organization.

2.6 Effort Allocation

Identification of project, requirements gathering and study of existing system accounts is 10 percent of effort. 15 percent of effort is normally applied to data modeling and coding. Identification of functional and non-functional requirements, testing result by using some test cases take 5 percent of project effort. Designing requires 30 percent of effort.

2.7 Summary

This chapter shows the system analysis of the project. The next chapter provides various system requirement specifications.

Chapter 3

System Requirement Specification

System Requirement Specifications chapter provides various requirements of the project such as functional,nonfunctional,software and hardware requirements. Understanding user requirements is an integral part of information systems design and is critical to the success of interactive systems. It is now widely understood that successful systems and products begin with an understanding of the needs and requirements of the users. User-centered design begins with a thorough understanding of the needs and requirements of the users. The benefits can include increased productivity, enhanced quality of work, reductions in support and training costs, and improved user satisfaction.

Chapter is of seven sections. Section 3.1 describes the required hardware for project, required software for project is describe in section 3.2, functional requirements are described in section 3.3, section 3.4 describes the Non-Functional Requirements of project, other requirements and various constraints are described in section 3.5, section 3.6 gives summary.

3.1 Hardware Requirements

1. Processor - Dual Core
2. Hard disk - 100GB
3. RAM - 2G
4. Printer
5. Scanner
6. Mobile Phone
7. laptop or computer

3.2 Software Requirements

1. Front End - Java 1.7.[5]
2. Back End - My SQL,[6]
3. Platform - Win XP, Linux, Netbeans, Text Pad.[4]
4. Library - itext pdf generator library 5.5.8[10]
5. Java Mail - Java Mail sending libraray.[7]

3.3 Functional Requirements

In software engineering, a functional requirement defines a function of a software system or its component. A function is described as a set of inputs, the behavior, and outputs. Functional requirements may be calculations, technical details, data manipulation and processing and other specific functionality that define what a system is supposed to accomplish.

3.4 Non-Functional Requirements

A non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. This should be contrasted with functional requirements that define specific behavior or functions. The plan for implementing functional requirements is detailed in the system design. The plan for implementing non functional requirements is detailed in the system architecture. The non functional requirement are:-

1. Every person have scan copies of the documents.
2. Every person have the original documents which are required to attach for issue the document.

3.5 Other Requirements and Constraints

Requirements analysis is not a simple process. Particular problems faced by the analyst are:

1. Addressing complex organizational situations with many users.
2. Users and designers thinking along traditional lines, reacting the current system and processes, rather than being innovative
3. Users not knowing in advance what they want from the future system.

[h]

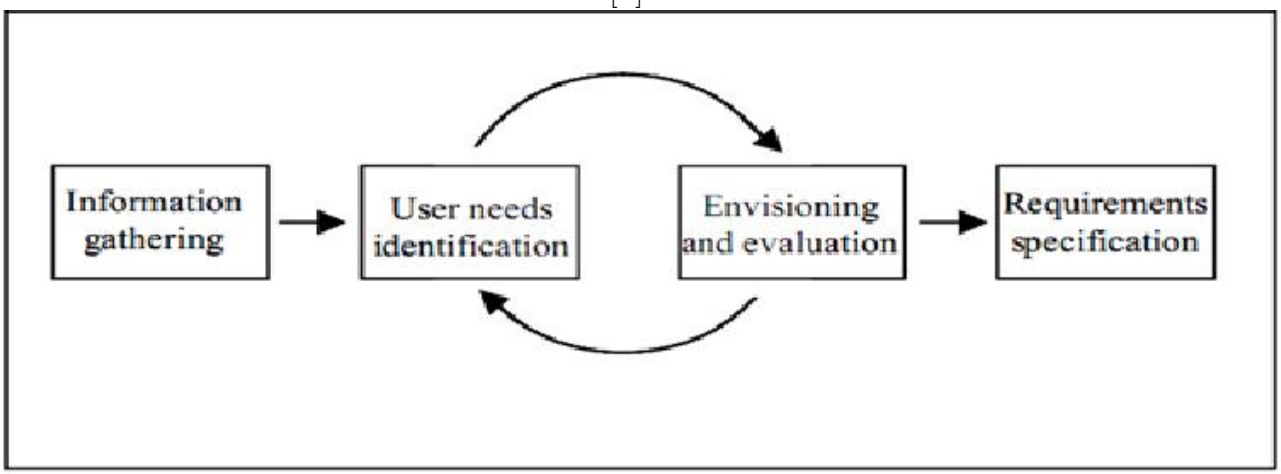


Figure 3.1: General Process for User Requirement Analysis

This section considers how these problems can be addressed by selecting appropriate methods to support the process of user requirements generation and validation. It describes each method briefly and shows how it contributes to the requirements process. The basis for the application of different user requirements methods is a simple process as shown in figure3.1;

3.6 Summary

This chapter shows the various system requirement specifications of the project. The next chapter provides system design of the project.

Chapter 4

System Design

System Design chapter provides graphical structure of the project by using various UML diagrams. System design provides the understanding and procedural details necessary for implementing the system recommended in the system study. Design is a meaningful engineering representation of something that is to be built. It can be traced to a customers requirements and at the same time assessed for quality against a set of predefined criteria for good design. In the software engineering context, design focuses on four major areas of concern are data, architecture, interfaces and components.

Chapter is of six sections. First section 4.1 describes system architecture of the project, E-R Diagram is describe in section 4.2, database design is described in section 4.3, section 4.4 describes the data flow of the project, various UML diagrams are describe in section 4.5, section 4.6 gives summary.

4.1 System Architecture

Figure 4.1 shows architecture which include following components:-

1. End User - This is the applicant who use our application.
2. GUI - This is graphical user interface for Digital Document Generation system.
3. Document - This is the final document in pdf form which is user want.
4. Database - This contain all the user information, attach documents scan copies, attach document information which is provide by user, generated document.

End user create account by using user interface. He requested for generate document. User interface provides multiple documents from which user select the document he want. User fills the required information and attach the scan copies of required information by

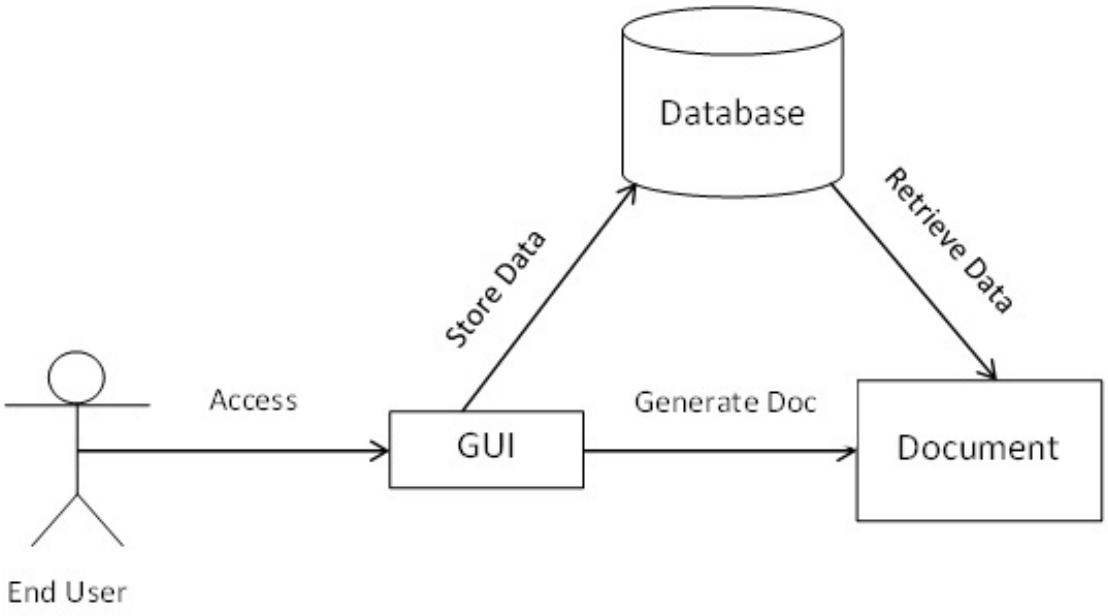


Figure 4.1: Architecture

using user interface. Database stores all this information provide by user. Final document is generated in PDF form by GUI using the information stored in database. The database is handle by admin.

4.2 E-R Diagram

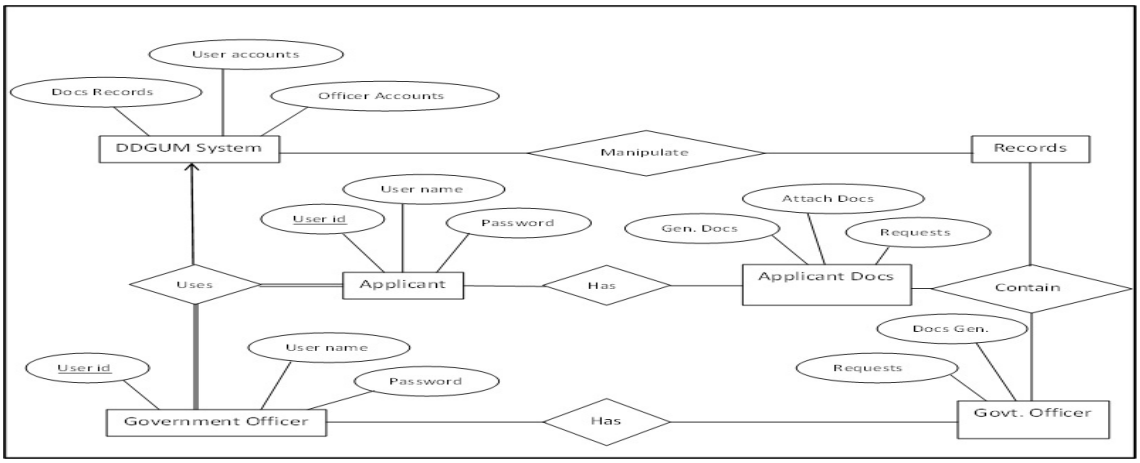


Figure 4.2: E-R Diagram

4.3 Database Design

The database design contains the database schema of the project.

4.3.1 Schema

Database schema shows the various tables use in database with their attributes. database schema is as follows :-

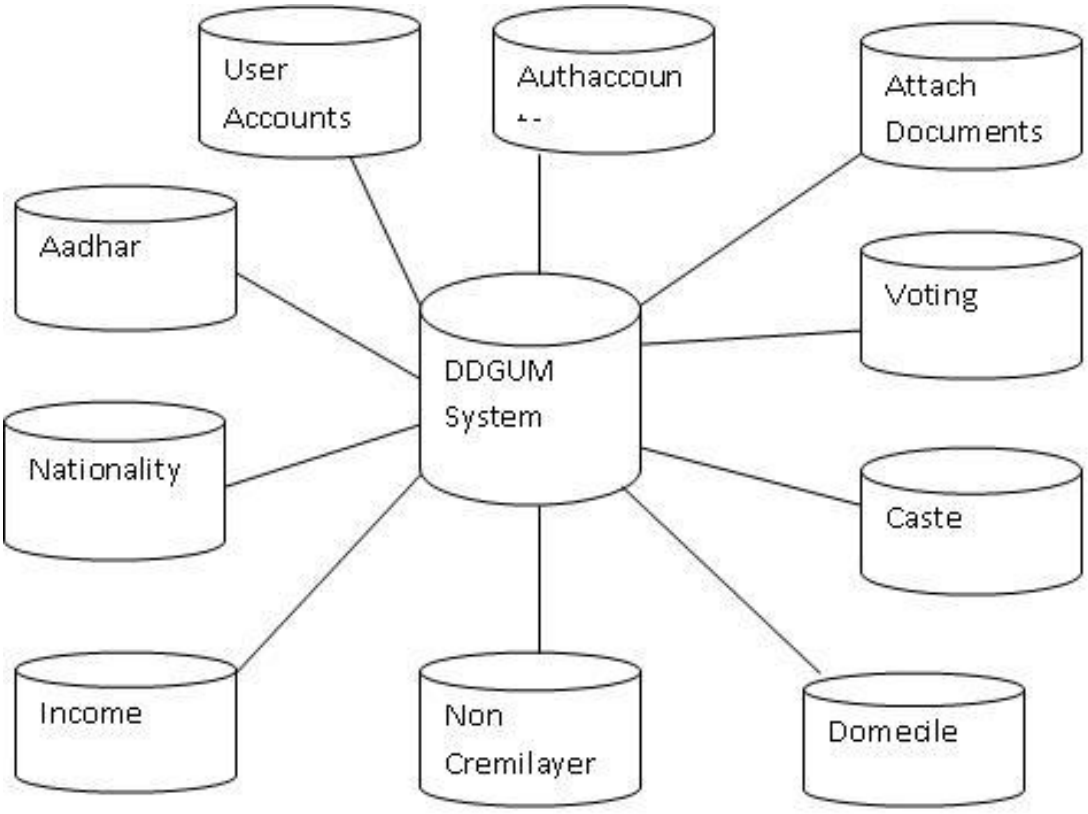


Figure 4.3: Database Schema

4.4 Data Flow Diagram

The DFD takes an input process output view of a system i.e. data objects into the software, are transformed by processing elements, and resultant data objects out of the software. The DFD enables the software engineer to develop models of the information domain and functional domain at the same time. As the DFD is refined into greater levels of details, the analyst perform an implicit functional decomposition of the system. At the same time, the DFD refinement results in a corresponding refinement of the data as it moves through the process that embody the applications.

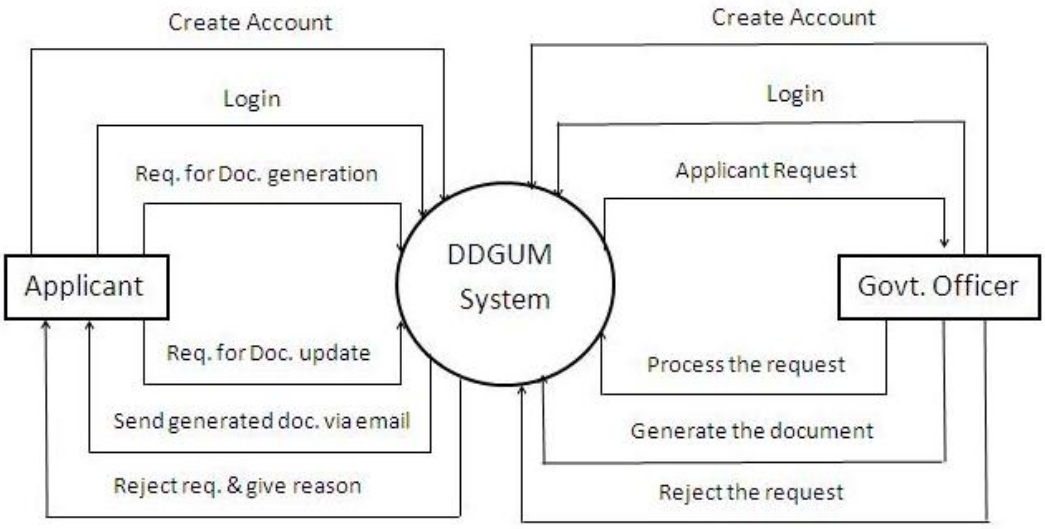


Figure 4.4: Data Flow Diagram

4.5 UML Diagrams

The Unified Modeling Language is a language that defines the industry's best engineering practices for the modeling systems. The goal of UML is to be a ready-to-use expressive visual modeling language that is simple and extensible.

Use case diagram shows a set of use cases, actors and their relationships. Use case diagrams address the static use case view of a system. These diagrams are especially important in organizing and modeling the behaviour of the system. figure4.5 Shows usecase digram of the project.

A class diagram shows a set of classes, interfaces, collaborations and their relationships. Class diagram address the static design view of a system. Class diagrams are important not only for visualizing, specifying and documenting structural models but also for constructing executable systems. figure4.6 Shows class digram of the project.

A sequence diagram is an interaction diagram that emphasizes the time ordering of messages. Sequence diagram is isomorphic means that we can take one and transform it into the other. figure4.7 Shows first sequence digram of the project. figure4.8 Shows second sequence digram of the project.

A state chart diagram shows a state machine, consisting of states, transitions, events and activities. State chart diagram address the dynamic view of a system. It is especially

important in modeling and behaviour of an interface, class or collaboration and emphasize the event-ordered behaviour of a object which is especially useful in modeling reactive systems.

A component diagram shows the organizations and dependencies among a set of components. Component diagram address the static implementation view of a system. They are related to class diagram in that a component typically maps to one or more classes, interfaces or collaborations.figure4.11 Shows compponent digram of the project.

A deployment diagram shows the configuration of runtime processing nodes and the components that live on them. Deployment diagram address the static deployment view of an architecture. They are related to component diagram in that a node typically encloses one or more components. figure4.12 Shows deployment digram of the project. figure4.5

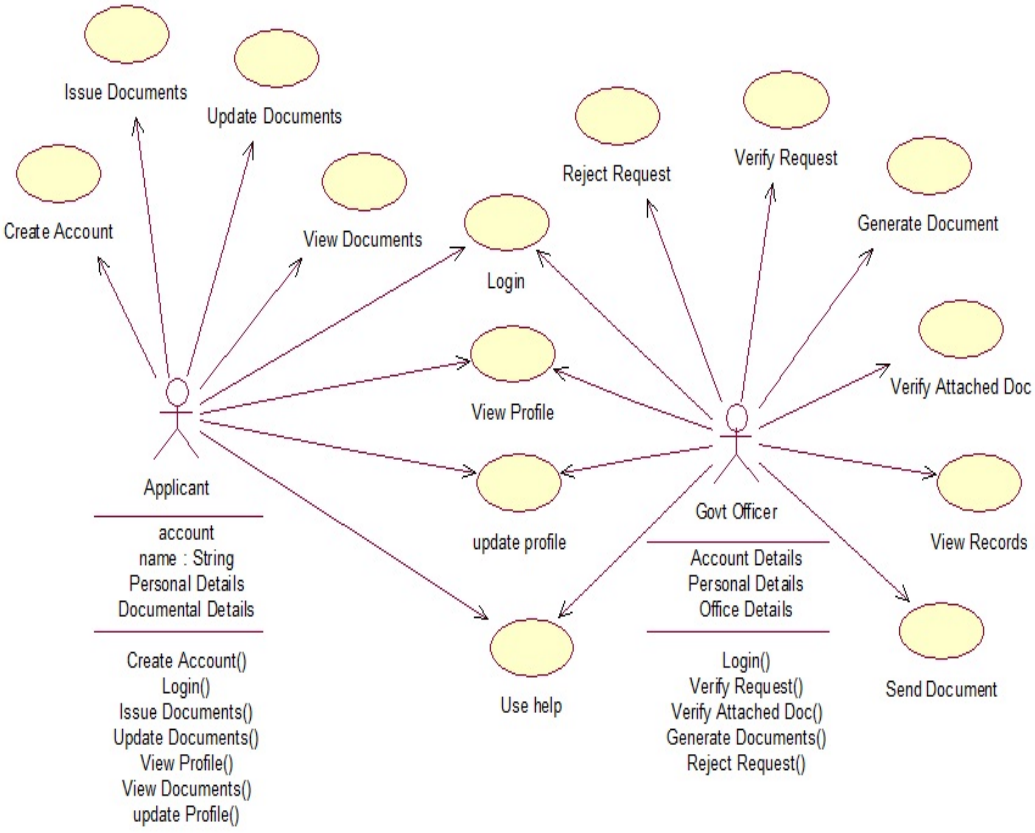


Figure 4.5: Usecase Diagram

Shows usecase digram of the project.

figure4.12 Shows deployment diagram of the project.

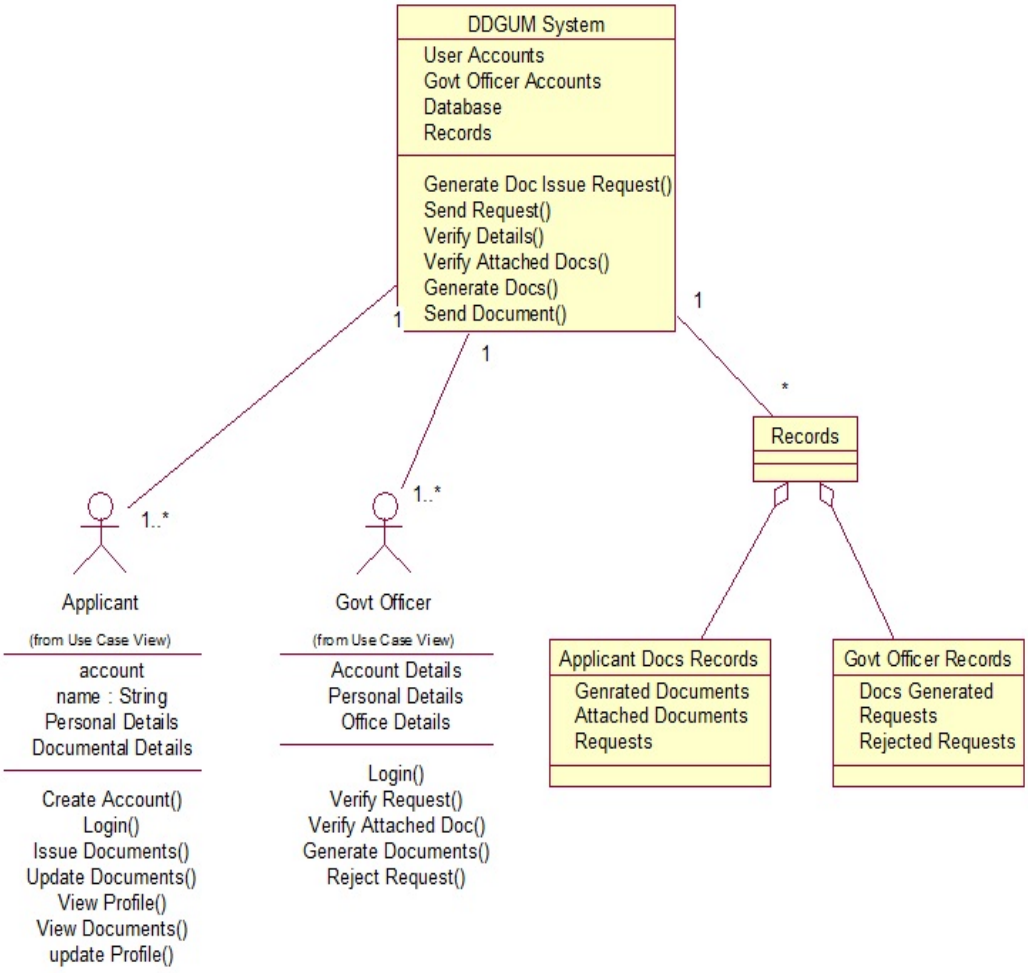


Figure 4.6: Class Diagram

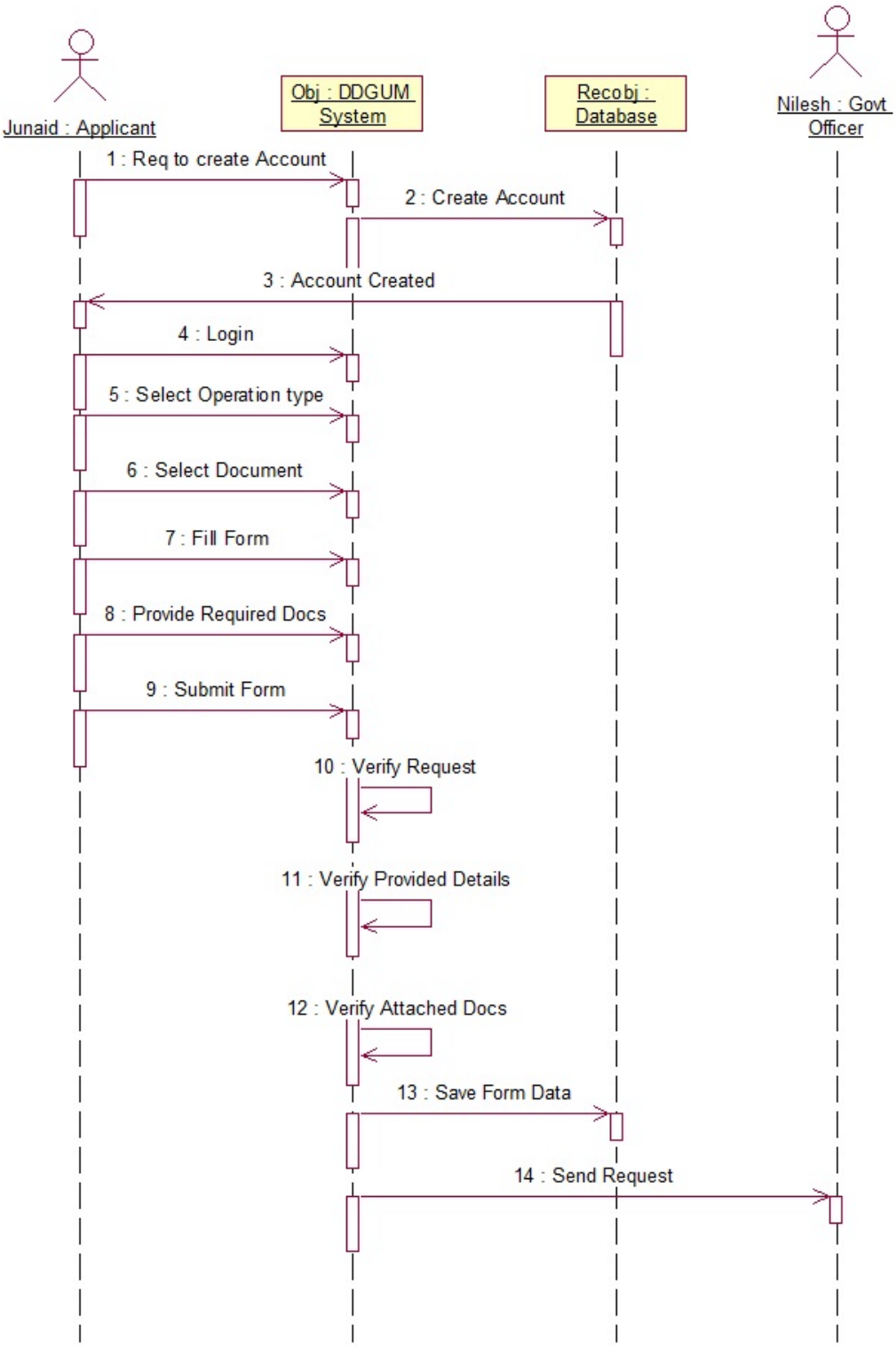


Figure 4.7: First Sequence Diagram

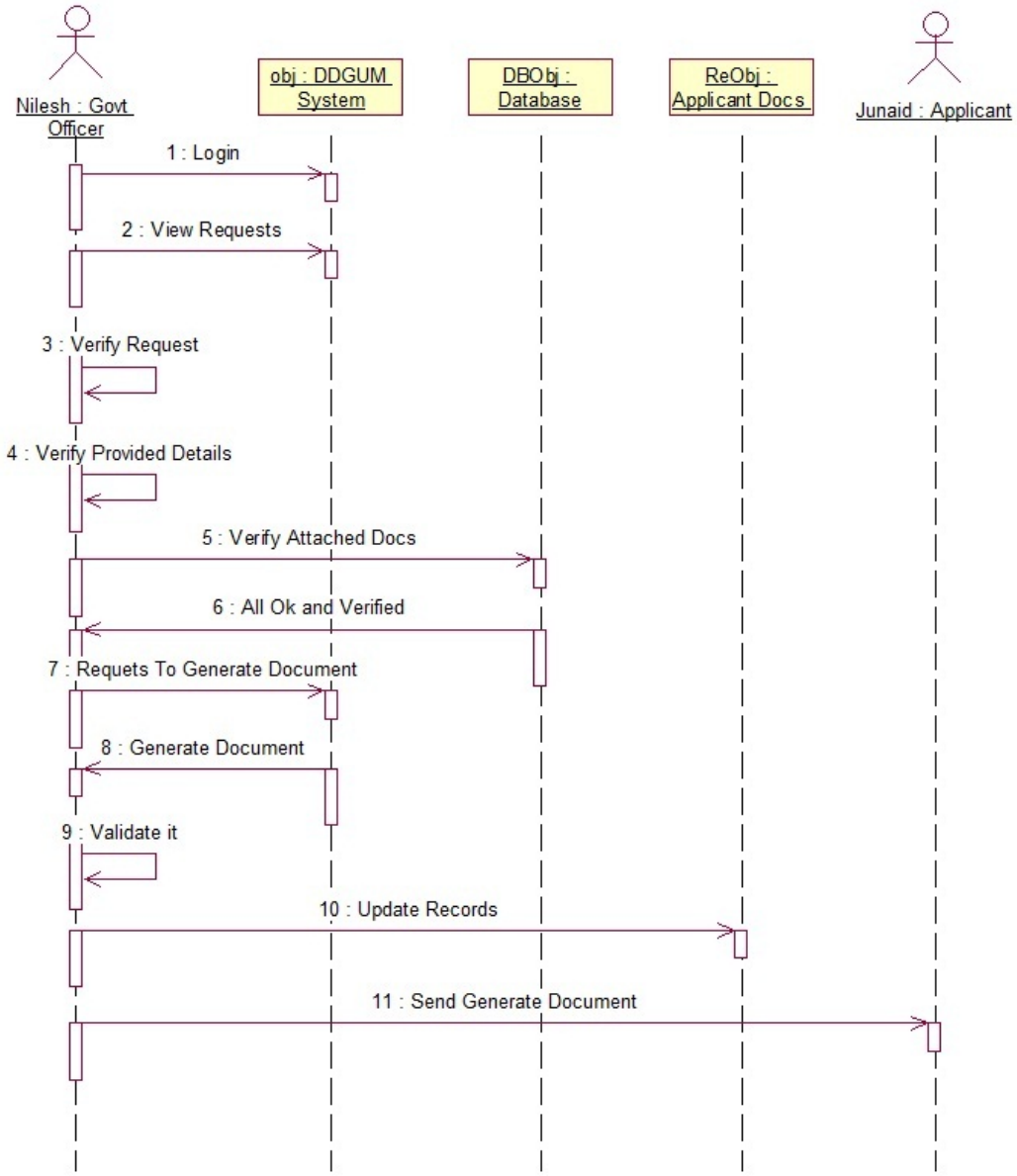


Figure 4.8: Second Sequence Diagram

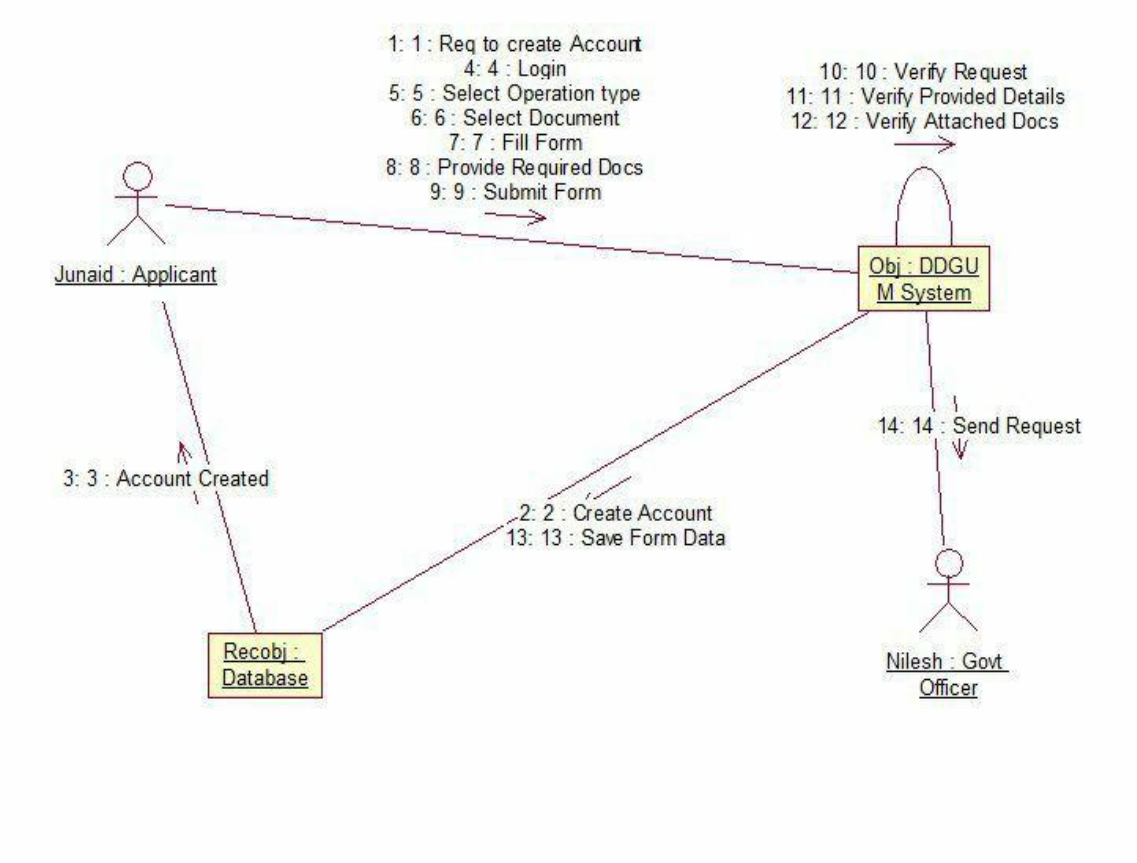
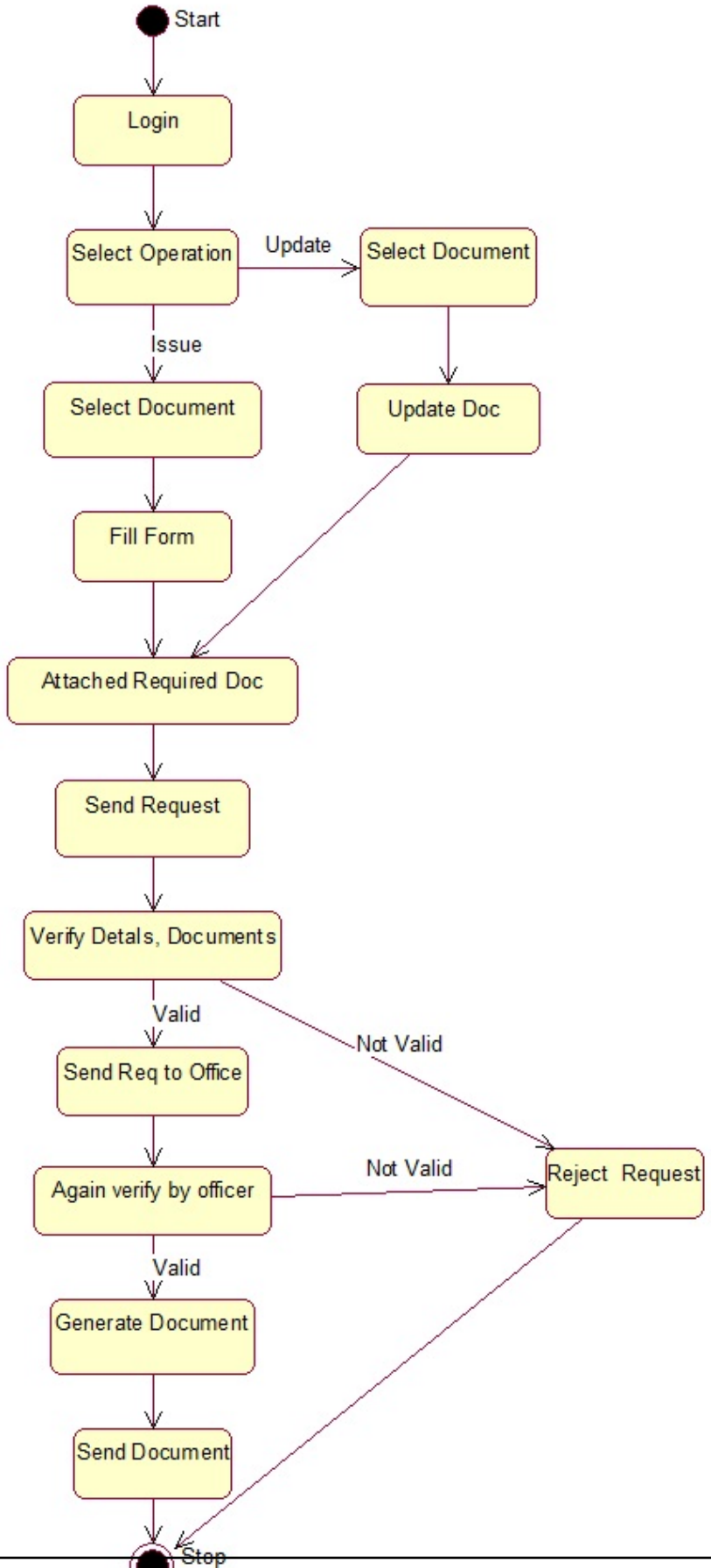


Figure 4.9: Collbratation Diagram


Start
Login
Select Operation
Update
Select Document
Issue
Select Document
Update Doc
Fill Form
Attached Required Doc
Send Request
Verify Detals, Documents
Valid
Not Valid
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Generate Document
Send Document
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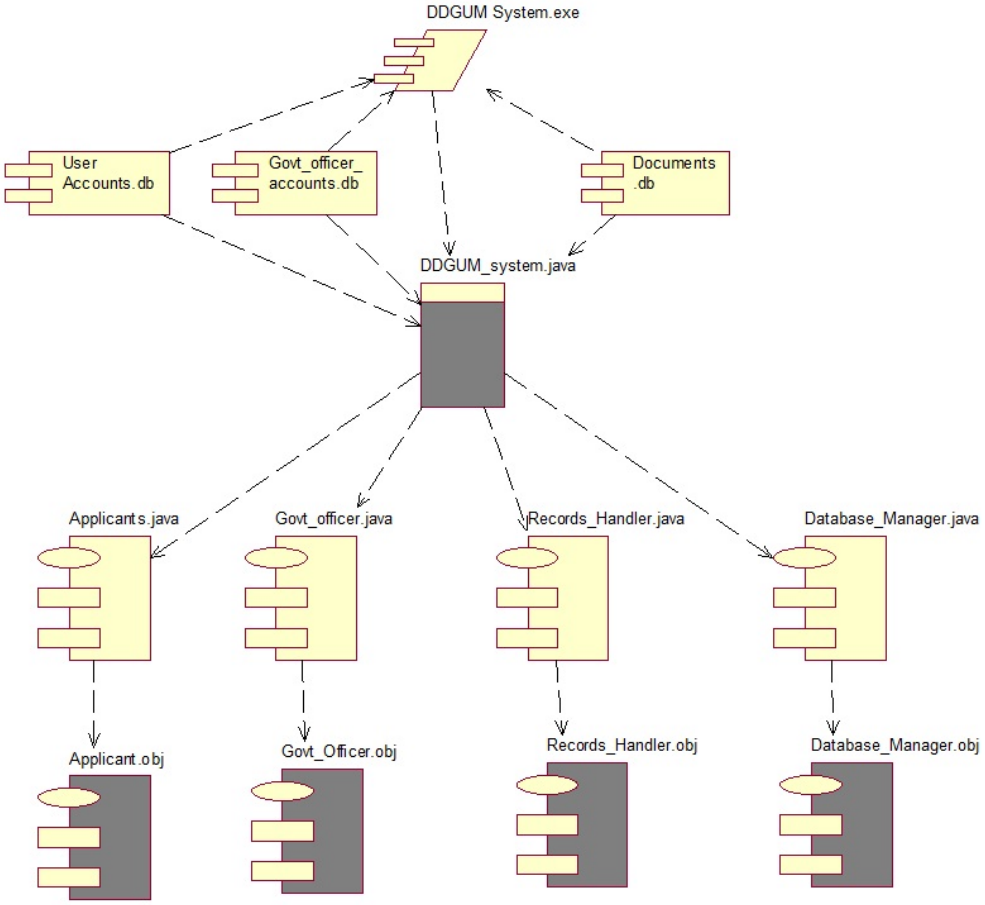

Figure 4.11: Component Diagram

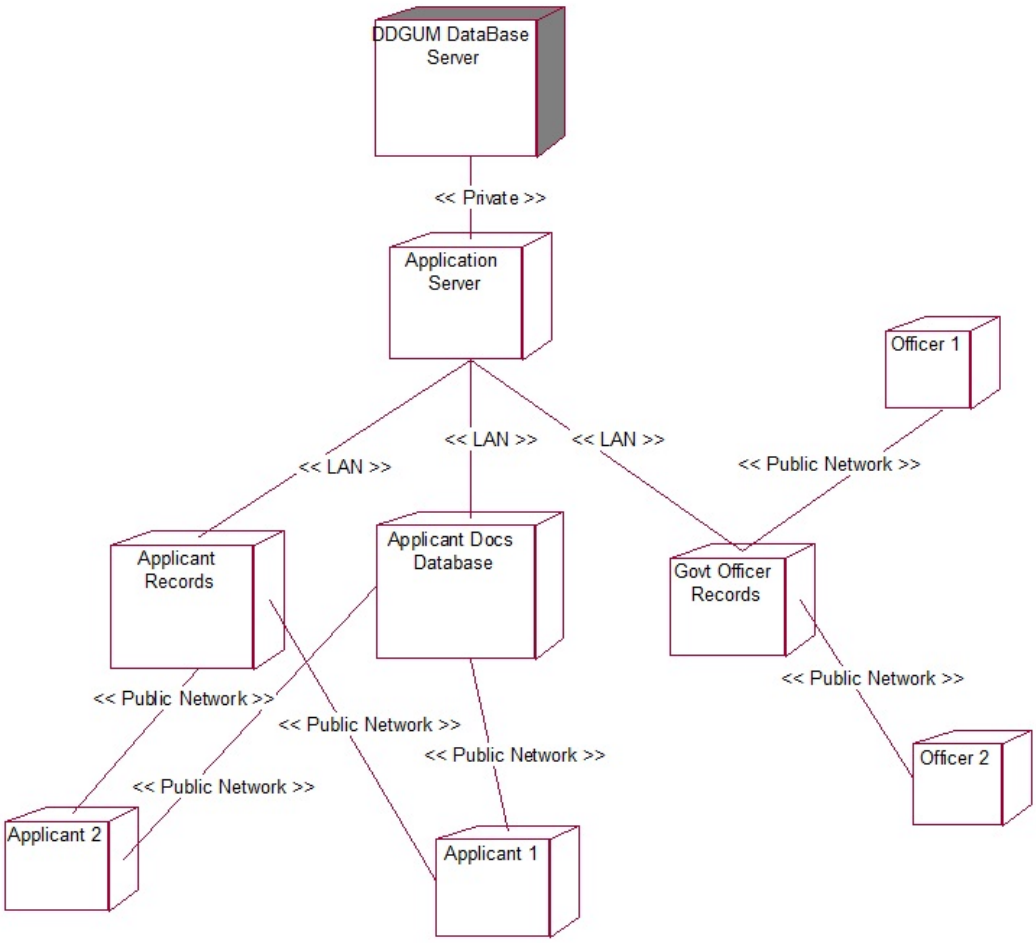

Figure 4.12: Deployment Diagram

4.6 Summary

This chapter shows the system design of the project. The next chapter provides implementation of the project.

Chapter 5

Implementation

Implementation chapter describes how the system is implement, various algorithms used for build the system. Implementation is the realization of an application, or execution of a plan, idea, model, design, specification, standard, algorithm, or policy. Implementation is the carrying out, execution, or practice of a plan, a method, or any design for doing something. As such, implementation is the action that must follow any preliminary thinking in order for something to actually happen. In an information technology context, implementation encompasses all the processes involved in getting new software or hardware operating properly in its environment,including installation, configuration, running, testing, and making necessary changes.

Chapter is of four sections. First section 5.1 describes implementation details of the project, implementation environment is describe in section 5.2, system development flow is described in section 5.3, section 5.4 gives summary.

5.1 Implementation Details

An implementation detail is the decision that is left to be made by the developers and is not specified at entire level. Such as requirement document or depending on the context of the architectural document.

In system, one application is developed for digitally generate document using portal middleware. It include one user interface, applicant is interact with this user interface. Database contain all the information of user, scan copies and information related to required documents which provide by applicant. User interact with user interface, information is stored in database, and the original documents is generated by access the information from the database. Database is handle by developer. There is government officer who can verify

the attach documents and information provide by applicant. Each user have user id and password so there is no unauthorised access is allowed.

5.2 Implementation Environment

An implementation detail is the decision that is left to be made by the developers and is not specified at entire level. Such as requirement document or depending on the context of the architectural document. This implementation is done through JAVA.

5.2.1 Application

Portal middleware is help for done opration from GUI to databases such as store data, access data within same application. For development of application, we use JDK 1.8.0 and java net beans editor is used. In this application, pdf generation library is required for this we use itext 5.5.8, itex 5.5.9, itext 3.7 library.

5.2.2 Database

For development of database we use MySQL which is a popular choice of for use in develop application. This application is create and manage MySQL databases, build database structures, back up data, inspect status, and work with data records. MySQL is a relational database management system (RDBMS), which is manage data contained within the databases.

5.3 Flow Of System Development

The flow of system development describes How you performed and develop the proposed methods and procedure. The project flow is done as follows :-

1. Applicant create account byh providing email id as user id and its own password.
2. In registration is user enter UID no then applicant personal info is fetch from aadhar database.
3. Applicant login and select the document he want to issue.
4. Applicant fill the form and provide the attach documents scan copies and attach documents numbers.
5. then government officer verify the documents.

6. If attach documents are valid then documents inforamtion is stored in database.

7. Document is generated in PDF format.

8. That document pdf is send to users email and also save in users account.

5.4 Summary

This chapter shows the implementation of the project. The next chapter provides system testing of the project.

Chapter 6

System Testing

System Testing chapter describe the result is correct or not by using some test cases. Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design, and code generation. The increasing visibility of software as a system element and the attendant "costs" associated with a software failure are motivating forces for well planned, thorough testing. Once source code has been generated, software must be tested to uncover and correct as many errors as possible before delivery to customer.

Chapter is of three sections. First section 6.1 describes how to implement testing, test cases and test results are describe in section 6.2, section 6.3 gives summary.

6.1 How To Implement Testing

A goal of testing is to design a series of test cases that have a high likelihood of finding errors. This technique provide systematic guidance for designing tests that :-

1. Exercise the internal logic of software components.
2. Exercise the input and output domains of the program to uncover errors in program function, behavior and performance.

Software is tested from two different perspectives: In both cases, the intent is to find the maximum number of errors with the minimum amount of effort and time. A set of test cases designed to exercise both internal logic and external requirements is designed and documented, expected results are defined, and actual results are recorded. While begin testing, change point of view. Try hard to "break" the software. Design test cases in a disciplined fashion and review the test cases you do create for toughness.

6.1.1 Black Box Testing

Internal program logic is exercised using "white box" test case design techniques. In this testing we consider each and every module to perform input and output test.

1. Validity Testing - For this module, we gave the expected inputs that are username and password. Then if test case pass, it willl ogin successfully.

2. Behavior and performance Testing - After successful Login we check whether users registers their complaint or not. Test case passes when the operations are correct and fail when exceptions occur.

3. Boundary Value Analysis - In this testing, we check whether mobile number which is entered by the users are below the 14 digits. If this condition fails then test case fails.

6.1.2 White Box Testing

Software requirements are exercised using "black box" test case design techniques. Independent Program paths:- in this we tested each module separately and tested that whether each module work correctly or not.

6.2 Test Cases And Test Results

In Positive Test Cases, the positive flow of the functionality must be considered , Valid inputs must be used for testing and Must have the positive perception to verify whether the requirements are justified. In Negative Test Cases, the negative flow of the functionality must be considered

6.3 Summary

This chapter shows the system testing of the project. The next chapter provides results and analysis of the project .

Chapter 7

Results And Analysis

Results and Analysis chapter shows the actual result of the project. Data analysis is a ongoing process in a project. It gives sufficient data to draw a meaningful conclusion. It can be wise to do some data analysis, even while collection of data is ready.

Chapter is of two sections. First section 7.1 provides algorithm of important processing of the project, section 7.2 gives summary.

7.1 Algorithm of Important Processing

This section provide the algorithms for important processing of the this project and also provide the output of each and every algorithm.

7.1.1 Algorithm for account creation

This section provide the algorithm for account creation as shown in fig 7.1.

1. Start
2. select 'create account'.
3. fill the required information necessary for account
   - if filled information is correct then
     goto next step
   - else
     goto step 5
4. create account with provided information.

- prompt 'account created with id'
  goto step 6.

5. prompt 'fill the required information'

   - goto step 3.

6. stop

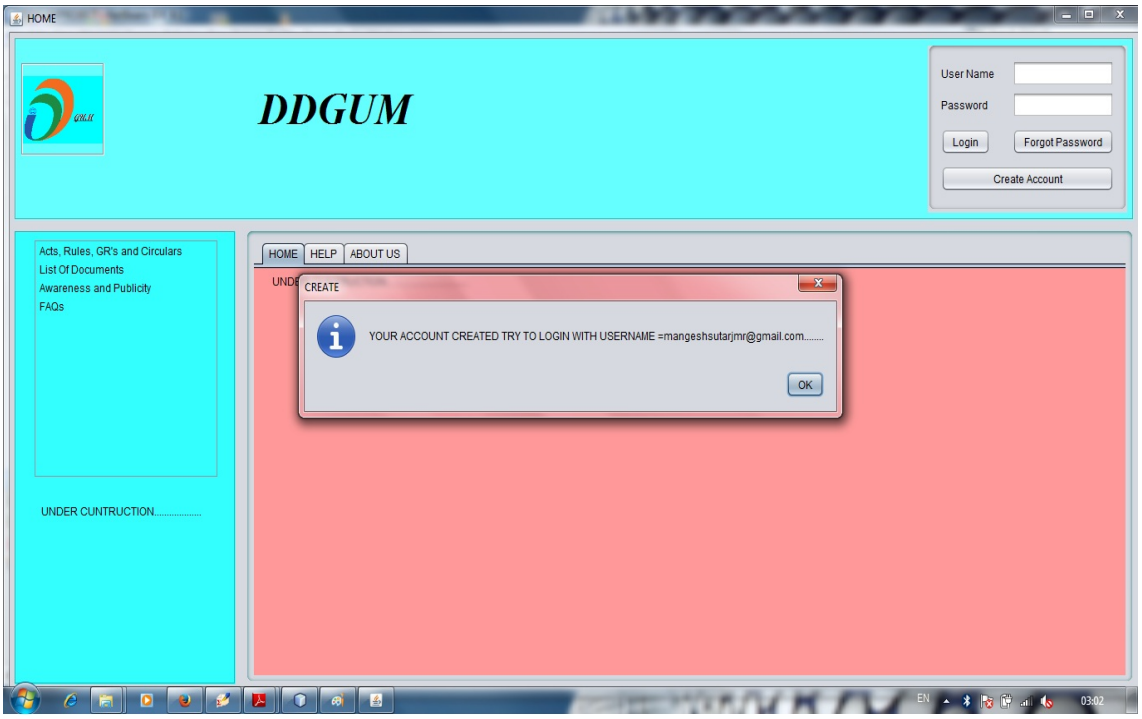

Figure 7.1: Account is created successfully

7.1.2 Algorithm to apply for issue document

This section provide the algorithm to apply for issue any document by the applicant.

1. Start

2. Login

3. If username and password is correct i.e login successful then
   goto next step

   - else
     goto step 7

4. Choose Applicant tab

   (a) select operation (eg. issue or update)

   (b) select the document from the list (eg. Nationality)
   (At this moment the system asked you for Aadhar card availability)

   (c) If you have Aadhar card then
   goto next step (i.e. form filling)

   - else
   (The system asked you to issue Aadhar card)
     - If yes then
     goto step 4
     - else
     goto step 2

5. Fill the application form.

   - provide personal details
   - provide attached document details
   - attach the required documents

6. submit the application

7. prompt 'Username and password is wrong'
   goto step 1.

7.1.3 Algorithm for application verification and document generation

This section provide the algorithm to verify application form and generation of requested document in pdf format as shown in fig 7.2.

1. Start

2. Login

3. If username and password is correct i.e login successful then
   goto next step

   - else
   goto step 7.

4. Choose Applications tab

   (a) select application from list of applications

   (b) verify personal details

   (c) verify attached documents detail

   (d) verify attached documents

   (e) If application verified successfully then
   goto next step

   (f) else
   reject the application.

5. generate the document in pdf format

6. send it to applicants email id.
   goto step 4.

7. prompt 'Username and password is wrong'
   goto step 1.

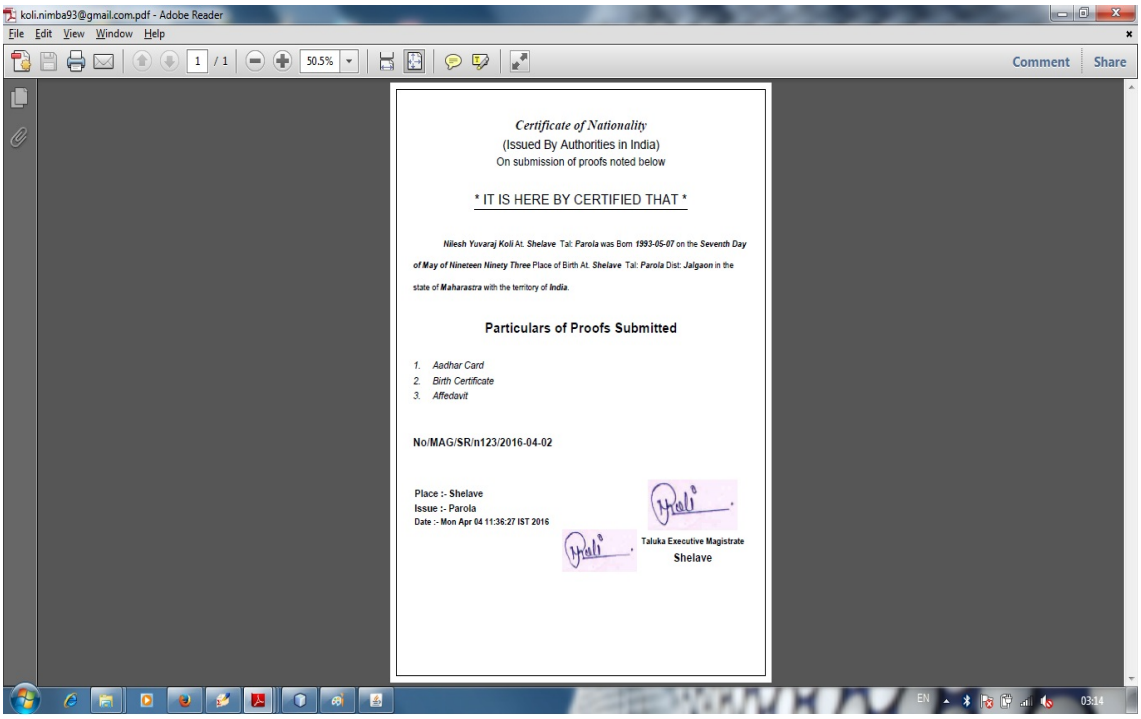

Figure 7.2: Generated Document in PDF format

7.1.4 Algorithm to recover password

This section provide the algorithm to recover the password if the applicant forgot it as shown in fig 7.3.

1. start
2. select 'forgot password'
3. fill the information necessary to recover password.
   - if filled information is correct, then
     goto next step.
   - else
     goto step 5.
4. prompt 'userid and password'
5. prompt 'please provide correct information'
6. stop

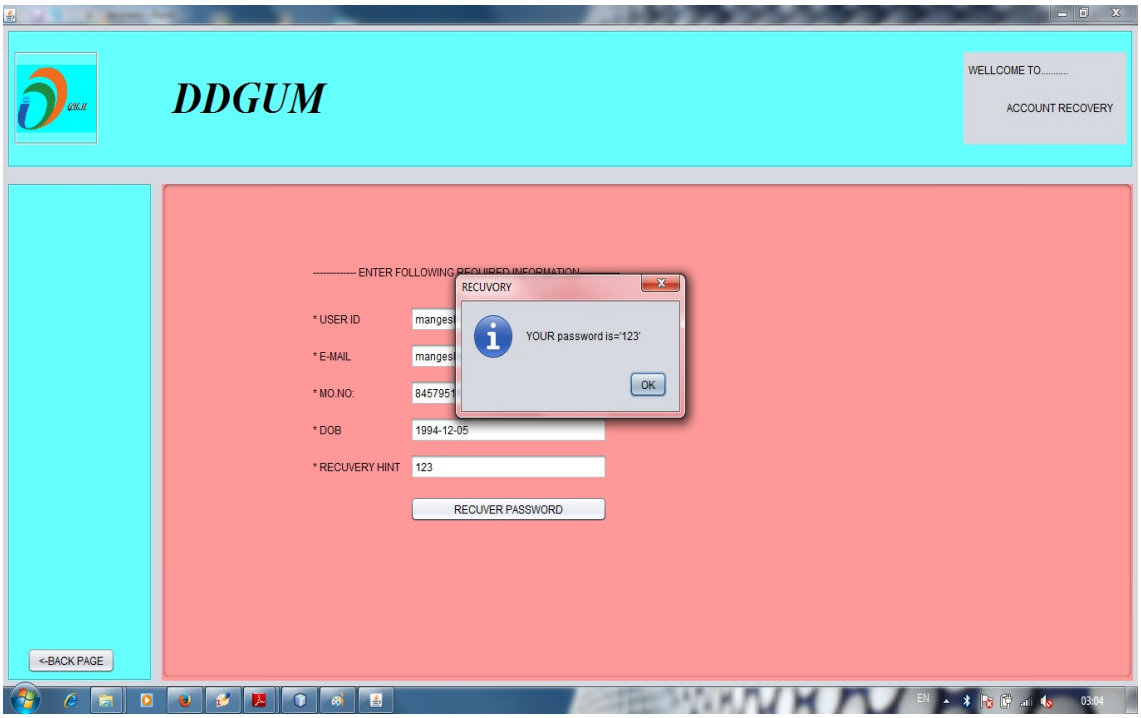

Figure 7.3: Recovery of password

7.2 Summary

This chapter provide the result and analysis of the project. The next chapter shows the future scope and future plan of developer regarding the project.

Chapter 8

Future Scope

Future Scope chapter provides various developers future plan about the project.

Chapter is of two sections. First section 8.1 describe future scope of project, section 8.2 gives summary.

8.1 Future Scope

In future, The project can be expanded by adding various feature to it such as Digital stamp generation. In this, verification sign is encrypted in barcode and that barcode is decrypted in verify sign. By this security is provided to generated document. And can also be add OCR image reader. By using OCR image reader, the documents attached by user can be read by the system and can be verified without human interruption by compairing document number provided by user and the attached document numbers. By this it is check that the correct document is attach by user or not. If this case is true then further process is done.

8.2 Summary

This chapter shows the future scope of the project.

Conclusion

The DDGUM project is design to make the documentation work digitalize. By this project applicant's time is save. This project is help to avoid corruption which is currently happening in case of documentation. It also provide simplicity that the form required to fill for issue or update the document contains only the mandatory information such as some personal details, attached document details etc. After verifying generate document, it directly send to users email in pdf form, by this user get document early. Verification is done by government officer so not illegal documents are accepted as proof. And each user have user id and password so unauthorised users are not allowed.

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